

924110/16/04

Revised

**CITY OF RIVERSIDE**  
**HUMAN RESOURCES DEPARTMENT**  
**CLASSIFICATION SPECIFICATION**

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**TITLE: PROGRAMMER ANALYST**

**DEFINITION**

Under general supervision, to perform a variety of technical and professional work in the analysis, design, programming, testing, installation, and maintenance of computer programs; conduct comprehensive systems analysis studies; present products to customers; resolve a variety of technical problems; and perform other related work as required.

**DISTINGUISHING CHARACTERISTICS**

This is the entry/journey level classification. Positions in this class initially perform work assignments of routine complexity which broadens in scope and variety as training is received. After acquiring the necessary experience, incumbents are expected to perform more technical assignments of moderate complexity and use independent judgment in dealing with project problems. Generally, work is observed and reviewed both during its performance and upon completion. Impact of decisions are considerable and contacts are typically with peers at similar levels.

**REPORTS TO:** Higher level programming or management staff, as assigned.

**SUPERVISION RECEIVED AND EXERCISED**

Initially receives close supervision from a higher level Programmer Analyst, or management employee, as assigned. As experience is gained, receives only general supervision. May supervise lesser-skilled employees, as assigned.

**EXAMPLES OF DUTIES**

Duties may include, but are not limited to, the following:

- Prepare system designs and specifications.
- Consult with department users to define general and detailed specifications of a proposed system.
- Translate system specifications into a logical process and set of computer instructions.
- Design testing methods and test completed programs and procedures for accuracy and completeness ensuring system requirements are met.
- Design input and report forms and file layouts for data entry.
- Implement and maintain programs performing modifications as necessary.
- Analyze problems related to the common use of data and develop compatible systems.
- Review established programs to refine procedures and make modifications to correct errors and reduce operating time and costs.
- Prepare activity and progress reports regarding project activities.
- Program new applications or modifications from limited verbal and written direction performing the necessary analysis to develop detailed program specifications.

**In addition, when assigned to the Management Services Division of the Police Department:**

- Assist in analyzing crime with basic and advanced GIS tools.
- Develop work flows for disseminating crime information from geographic perspectives.
- Plan for and perform basic and advanced processing tasks using GIS products and extensions.
- Develop and maintain GIS related databases.
- Write scripts such as Visual Basic for Applications, Structured Query Language, Extensible Markup Language, Extensible Hypertext Markup Language, Hypertext Markup Language to support applications.
- Conduct training for GIS users.
- Develop and coordinate GIS application work flows for GIS users.
- Install, update and upgrade desktop and server based GIS software.
- Research for spatial analysis tools and applications that can support law enforcement spatial analysis.
- Perform map production tasks.
- Serve as departmental liaison with the City's GIS team and participate in City-wide GIS activities.
- Coordinate the implementation of GIS technology with vendors and Information Technology staff.
- Recommend new GIS technology to management, and implement approved technology.
- Supervise additional Police GIS staff and oversee Department wide coordination of GIS applications throughout the Police Department.

**QUALIFICATIONS**

**Knowledge of:**

- Principles and techniques of programming for data processing.
- Principles of computer systems and procedures analysis and design.
- Use, capacity, characteristics, and limitations of computers, software, and related equipment.
- Records storage and handling techniques.
- Specific business related functions depending on area of assignment.

**When assigned to the Management Services Division of the Police Department:**

- GIS software and ability to manipulate, convert, analyze and map geo-spatial data.
- ArcGIS, ArcIMS, Structured Query Language, ArcSDE and related databases.
- GIS data entry, database management and documentation.
- General knowledge of modern computer systems (hardware), operating systems, computer networking, web technology and client server technology.

**Ability to:**

- Analyze data and develop logical and cost effective solutions to problems.
- Conduct data processing systems and procedures analysis and feasibility studies.
- Develop computer programs and create program specifications.
- Maintain technical libraries and documentation files.
- Communicate clearly and concisely, orally and in writing.
- Establish and maintain efficient working relationships with those contacted in the course of work.

**When assigned to the Management Services Division of the Police Department:**

- Supervise, train and evaluate subordinates; plan and schedule work assignments for, and set priorities of, assigned staff.
- Adhere to deadlines and be able to handle multiple projects simultaneously.
- Understand and carry out complex assignments from oral and written directions; interpret rules, regulations and laws.
- Maintain the confidentiality of privileged and/or confidential information.
- Work a flexible schedule when the need arises to support Police 24/7 operations.

**Education and Experience:**

Any combination of experience and education that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Education: Equivalent to an Associate degree from an accredited college or university with major work in computer science, computer information systems, data processing, or a closely related field. One year of additional qualifying experience may substitute for one year of the required education. Higher level education and certification in GIS/Crime Analysis Certification is preferred when assigned to the Management Services Division of the Police Department.

Experience: A range of 1-2 years experience in developing, documenting, and programming of data processing problems for mini and mainframe computers. When assigned to the Management Services Division of the Police Department, one to two years working with Environmental Studies Research Institute based GIS technology is required.

**MEDICAL CATEGORY:** Group 1

**CAREER ADVANCEMENT OPPORTUNITIES**

Possession of an appropriate, valid Class "C" California Motor Vehicle Operator's License.

**FROM:** Programmer Analyst or Systems Analyst

**TO:** Senior Programmer Analyst or Senior Systems Analyst